IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF PENNSYLVANIA

DOMINIC ROSSANO,

Plaintiff,

v. :

.

MAXON, et al.,

Defendants.

Civil No. 5:21-cv-01353-JMG

MEMORANDUM OPINION

GALLAGHER, J. March 3, 2023

Plaintiff Dominic Rossano alleges he suffered an injury while using a truck with a liftgate leased by his employer to make a delivery. Plaintiff then sued Defendant Maxon Industries, the liftgate designer and seller; Defendant Morgan Truck Body, the liftgate installer and truck seller; and Defendant Ryder Truck Rental, Inc., the truck lessor. Plaintiff maintains claims of negligence, products liability, and breach of warranty against Maxon. Plaintiff also brings products liability claims against Morgan and Ryder. Before the Court is Maxon's motion to preclude two of Plaintiff's experts: biomechanical engineer Robert Nobilini, Ph.D., and engineer Craig Clauser. Defendant Morgan also moves to join Maxon's present motion to preclude Plaintiff's experts Nobilini and Clauser. For the following reasons, Maxon's motion will be denied in part and granted in part.

I. FACTUAL BACKGROUND

Plaintiff Rossano alleges he suffered an injury on March 4, 2019 while using a truck leased by his employer, Penn Jersey Paper Company ("Penn Jersey"), to make a delivery to a school in New Jersey. Pl. Second Am. Compl., ECF No. 31 ¶9. Plaintiff alleges he sustained an injury

"while attempting to lower and then manually unfold the lift gate from the trailer portion of the truck, which was defective in nature." *Id.* ¶11.

Following Plaintiff's injury, Plaintiff filed a complaint alleging claims against Maxon Industries, which designed and sold the liftgate at issue to Morgan Body Truck; Morgan Truck Body, who installed the liftgate on a truck it sold to Ryder; and Ryder Truck Rental, Inc., who then leased the truck to Plaintiff's employer, Penn Jersey. Currently, Plaintiff brings claim of negligence, products liability, and breach of warranty against Maxon. Plaintiff also brings products liability claims against Ryder and Morgan.

The Parties have completed fact discovery. Defendant Maxon now moves to preclude two of Plaintiff's experts: biomechanical engineer Robert Nobilini, Ph.D. and engineer Craig Clauser. First, Nobilini considered whether "the forces required to operate the subject liftgate were a contributing factor to Mr. Rossano's injuries." Nobilini Report of Examination, ECF No. 68-13 at 3. To opine on this issue, Nobilini considered various litigation documents related to the current action; examined the incident site, the subject truck, and lift gate, which included obtaining measurements and taking photographs; and analyzed various industry and occupational standards concerning push and pull forces. *See id.* at 3-8. Nobilini concluded, *inter alia*, "[t]he force required to pull the subject lift gate out from under the truck was excessive and created an increased risk of injury to Mr. Rossano." *Id.* at 8. Nobilini also opined "[h]ad the lift gate been designed to reduce the force required to pull the gate out to a safe level, Mr. Rossano would not have had to lunge to pull the gate out, which would have further reduced the forces on his body and the risk of injury." *Id.*

Second, Clauser analyzed the design of the liftgate at issue, and provided alternative designs of the liftgate. Like Nobilini, Clauser considered numerous litigation documents and

visited the incident site to examine, photograph, and record various dimensional measurements. Clauser Report of Examination, ECF No. 68-14 at 2-3. Clauser also examined Nobilini's report on the amount of force needed to operate the liftgate. *Id.* at 3-4 ("I have reviewed the report on this matter of Dr. Robert Nobilini... who makes it clear that the excessive force required to unfold the platform and the location of the grasping point of the lift gate platform created a dangerous hazard...."). Clauser utilizes theses sources, as well as "[a] basic principle of safety engineering ... the Order of Precedence or Safety Hierarchy[,]" *id.* at 4, to conclude the "failure of the manufacturer to utilize a safe alternative design that would have eliminated the hazard and protected the user is defective design." *Id.* at 5. So, he avers, "[h]ad the liftgate been properly and non-defectively designed this incident and Mr. Rossano's injury would have been prevented."

In his report, Clauser put forward five "alternative safe designs":

- [(1)] Include a spring-loaded fold out handle on the underside of the forward platform section near the wedge hinge (top) that could be opened to pull the platform out to unfold it . . .
- [(2)] Include a handle on a self-retracting cable on the underside of the forward platform section near the wedge hinge (top) that could be extracted to allow the user to unfold the platform with two hands from a less awkward position.
- [(3)] Relocate the platform opener roller (rearward) to position the folded platform in a more vertical position which would reduce the required opening force. A latch or detent could be provided to prevent the platform from falling out
- [(4)] Provide a spring-loaded lever on the side of the platform that would allow the user to open the platform from a less awkward position using two hands.
- [(5)] Make the platform opener roller an active rather than a passive device by incorporating a hand crank or a hydraulic plunger with hand pump that could extend the roller arm and push the platform reward[sic]....¹

¹ ECF No. 68-14 at 5. In his deposition testimony, Clauser also identified a sixth alternative design. He provided this sixth design would utilize a metal bar with a hook on one end and a handle on the other end. This design would, Clauser avers, enable an operator to "reach in and hook that over the top of the platform and pull [the liftgate] out from a standing position." ECF No. 75-7 at 28, Clauser Dep. Tr., 105:8-19. So the tool would be placed in the vehicle and allow a user to "reach the top of the gate while still being standing up, behind the truck." *Id.*, Clauser Dep. Tr., 106:3-24, 107:1-6.

Clauser also described his use of "[a] risk utility analysis . . . [to] conclude[] that the seriousness of harm far outweighs the minimal additional cost (if any) of assuring the product was safe."²

Maxon contends the testimony and opinions of both Nobilini and Clauser should be precluded because "their opinions are not the product of reliable principles and methods" and thus are insufficient under Federal Rules of Evidence 702 and 703, and *Daubert v. Merrill Dow Pharmaceuticals*, 509 U.S. 579 (1993). Def.'s Mot. in Lim., ECF No. 68-2 at 6-7. Defendant Morgan moved to "join" Defendant Maxon's present motion to preclude Plaintiff's experts Nobilini and Clauser. *See generally* ECF No. 73 at 1. On the other hand, Plaintiff submits the experts' reports and testimony are sufficient "based on their extensive engineering experience, review of the relevant records, and their inspection and testing of the subject lift gate in accordance with recognized engineering principles." Pl.'s Resp. Br. in Opp'n, ECF No. 75 at 3.

II. LEGAL STANDARD

Under the Federal Rules of Evidence, district courts must act as the gatekeepers of expert testimony. *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 589 (1993); *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 141 (1999); FED. R. EVID. 702. Before testimony can reach the jury under the cloak of expertise, the Court must evaluate it for three criteria: qualification, reliability and fit. *UGI Sunbury LLC v. A Permanent Easement for 1.7575 Acres*, 949 F.3d 825, 832 (3d Cir. 2020).

A witness is *qualified* to provide expert testimony only if the witness has "specialized expertise" in the testimony's subject matter. *Schneider ex rel. Est. of Schneider v. Fried*, 320 F.3d

² ECF No. 68-14 at 5. In his deposition, Clauser clarifies the "risk-utility analysis" he performed on each design, as well as his calculations of cost estimations, are based on his experience "in the metal-fabricating industry for the best part of 50 years." ECF No. 75-7 at 20, Clauser Dep. Tr., 74:2-4: *see also* ECF No. 68-14 at 2-4.

396, 404 (3d Cir. 2003). A witness's testimony is *reliable* only if it is founded upon "good grounds." *UGI Sunbury LLC*, 949 F.3d at 834; FED. R. EVID. 702 (requiring expert testimony be "based on sufficient facts or data" and be derived from "reliable principles and methods" that have been "reliably applied . . . to the facts of the case."). The U.S. Court of Appeals for "[t]he Third Circuit has interpreted 'reliability' to mean that an expert's testimony is admissible so long as the process or technique the expert used in formulating the opinion is reliable." *Elgert v. Siemens Indus., Inc.*, No. CV 17-1985, 2019 WL 1294819, at *5 (E.D. Pa. Mar. 20, 2019) (quoting *Pineda v. Ford Motor Co.*, 520 F.3d 237, 244 (3d Cir. 2008) (internal citations omitted)).

So "[a] district court is directed to the following factors to determine the reliability of proposed expert testimony: '(1) whether a method consists of a testable hypothesis; (2) whether the method has been subject to peer review; (3) the known or potential rate of error; (4) the existence and maintenance of standards controlling the technique's operation; (5) whether the method is generally accepted; (6) the relationship of the technique to methods which have been established to be reliable; (7) the qualifications of the expert witness testifying based on the methodology; and (8) the non-judicial uses to which the method has been put." *Id.* (quoting *Schneider*, 320 F.3d at 405 (citing *In re Paoli R.R. Yard PCB Litig.*, 35 F.3d 717, 742 n. 8 (3d Cir. 1994)).

And lastly, a witness' testimony *fits* a case only if it would help the trier of fact to understand the evidence or determine a fact in issue. *UGI Sunbury*, 949 F.3d at 835 (quoting FED. R. EVID. 702); *see also United States v. Ford*, 481 F.3d 215, 219 n.6 (3d Cir. 2007) ("[F]it is [primarily] a relevance concern.") (internal quotation marks omitted). "The Supreme Court explained in *Daubert* that Rule 702's helpfulness standard requires a valid scientific connection to the pertinent injury as a precondition to admissibility." *Elgert*, 2019 WL 1294819, at *3-4 (quoting

Schneider, 320 F.3d at 404 (internal citation omitted)).

The Rules of Evidence reflect a liberal policy of admissibility, even for expert testimony. *Pineda v. Ford Motor Co.*, 520 F.3d 237, 243 (3d Cir. 2008). But expert testimony must satisfy the requirements set out above to be admissible. *UGI Sunbury*, 949 F.3d at 832–33. The burden to establish that each requirement is satisfied by a preponderance of the evidence rests with the party offering the expert testimony. *See Padillas v. Stork–Gamco, Inc.*, 186 F.3d 412, 418 (3d Cir.1999).

III. DISCUSSION

a. Defendant Morgan's Motion to Join Defendant Maxon's Motion in Limine to Preclude Plaintiff's Experts Nobilini and Clauser

Defendant Morgan moves to "join" Defendant Maxon's present motion to preclude Plaintiff's experts Nobilini and Clauser. *See generally* Def. Morgan Reply Joining Def. Maxon's Mot. in Lim., ECF No. 73 at 1. Although titled as a "Reply Joining Defendant Maxon's Motion in Limine," the Court will consider Maxon's reply as a motion to join. *See id.* at 1. Morgan contends it may join Maxon's motion under Federal Rule of Civil Procedure 10(c), which provides "[a] statement in a pleading may be adopted by reference elsewhere in the same pleading or in any other pleading or motion." FED. R. CIV. P. 10(c). "Rule 10(c), however, provides no authority for one party to adopt by reference the arguments advanced by another party in a motion in which the first party seeks to join." *Krause v. Buffalo & Erie Cnty. Workforce Dev. Consortium, Inc.*, 425 F. Supp. 2d 352, 363 (W.D.N.Y. 2006). "Rather, where a motion to join is unopposed, the arguments proffered by the defendant initiating the motion apply equally to all co-defendants, and granting the motion to join will not prejudice the plaintiff, the motion to join is generally granted." *Id.* (citing *Gulf Coast Development Group, LLC v. Lebror*, 2003 WL 22871914, *1 n. 1

(S.D.N.Y.2003); Sacay v. Research Foundation of City University of New York, 44 F.Supp.2d 505, 509 (E.D.N.Y.1999)).

Here, Morgan's motion to join is unopposed. Morgan also contends it, like Defendant Maxon, may be liable for Plaintiff's products liability claims if the liftgate is found to be defective. See ECF No. 73 at 2. So Morgan moves to join "Maxon's arguments in its Motion in Limine to Preclude Plaintiff's Experts on the basis that their opinions are not the product of reliable principles and methods and cannot withstand the scrutiny for expert testimony" Id. The Court will grant Morgan's motion to join because it is unopposed, Maxon's arguments apply equally to Morgan as a co-defendant, and the Court finds minimal, if any, prejudice to the plaintiff. The Court will now consider the merits of Maxon's motion to preclude.

b. Defendant Maxon's Motion in Limine to Preclude Plaintiff's Experts Nobilini and Clauser

Defendant Maxon moves to preclude the opinions of Plaintiff's experts Robert Nobilini, Ph.D. and Craig Clauser. Maxon contends Nobilini's opinions do not meet Daubert's requirements of reliability and "fit." *See generally* ECF No. 68-2 at 10-18. Maxon further submits Clauser's opinions are unreliable and thus insufficient under *Daubert*. The Court considers Maxon's arguments in seriatim.

i. Robert Nobilini, Ph.D.

First, Maxon avers Nobilini's use of European and other occupational guidelines are not applicable to the underlying facts at issue and thus do not satisfy the "fit" component. ECF No. 68-2 at 10-11. As stated, in developing his opinion on the design of the liftgate and its required use of force, Nobilini inspected and measured the liftgate at issue, and researched several push-

³ Maxon does not dispute Nobilini's engineering qualifications.

pull force standards. ECF No, 68-13 at 4-7. Nobilini considered European and Canadian standards, as well as others.⁴ He then used the standards to determine the maximal amount of force required to pull out the subject liftgate and, ultimately, opine on whether the overall design of the liftgate required an "excessive" force to operate. *Id.* at 7-8. Maxon submits Nobilini's consideration of European standards—standards which, Maxon avers, it is not required to satisfy in the United States—are not relevant to the issue at hand and thus do not Daubert's "fit" requirements. *See* ECF No. 68-2 at 11. The Court disagrees.

Federal Rule of Evidence 702 "requires that an expert's testimony assist the trier of fact in resolving a factual dispute." *Lynn ex rel. Lynn v. Yamaha Golf-Car Co.*, 894 F. Supp. 2d 606, 620 (W.D. Pa. 2012) (citing *Daubert*, 509 U.S. at 591). "In other words, an expert's testimony passes the "fit" test if there is a clear, valid scientific connection between the expert's opinion and the particular disputed factual issues in the case." *Id.* (citing *Meadows v. Anchor Longwall & Rebuild, Inc.*, 306 F. App'x 781, 790 (3d Cir. 2009); *Paoli II*, 35 F.3d at 742-43).

The present dispute, whether the liftgate at issue is a defective product, is rather broad in nature. Nobilini's opinion considers various standards to determine an appropriate use of force needed to operate a liftgate, and ultimately, whether the liftgate at issue was defective in the amount of force it required. Nobilini does not attempt to opine on whether Maxon satisfied certain occupational standards. Rather, Nobilini considers whether the force required on the liftgate presents a defect in the product. Beyond the international occupational standards Maxon takes

⁴ *Id.* at 6-7. Specifically, Nobilini's report provided "[a] European standard for lift gates, DIN EN 1756-01... stated that 'The effort for deploying and stowing the tail lift manually shall not exceed 250 N (56.2 lbs.)..." *Id.* at 6. Nobilini also cited to a Canadian resource called "The Canadian Centre for Occupational Health and Safety (CCOHS)." *Id.* The CCOHS source "provided limits for horizontal push and pull forces required for tasks." *Id.*

issue with, Nobilini discusses several other occupational standards concerning the maximum amount of force required to pull out the subject lift gate. ECF No, 68-13 at 6-8. He combines this survey of industry standards with his own inspection of the lift gate. *See id.* at 4-7. Ultimately, Nobilini opines on the overall design of the liftgate and the amount of force needed to operate it—here, he claims the liftgate at issue requires an excessive force to operate and thus would create an increased risk of injury to users. *Id.* at 8. So Nobilini's use of various international and occupational standards is relevant in his determination an "excessive" force is needed to operate the forklift at issue. Notably, Nobilini does not opine Defendant failed to meet industry standards, including the international standards. *Cf Terry v. JLG Indus., Inc.*, No. CIV-07-1308-HE, 2009 WL 10672459, at *4 (W.D. Okla. Apr. 8, 2009). Nobilini's use of the international standards, in combination with other occupational standards on push and pull forces, to opine on the product at issue's risk of injury is relevant to Plaintiff's products liability and related claims.

Further, Maxon's criticism of Nobilini's *application* of the international and other occupational standards to the facts at hand "is a criticism of [Nobilini's] results, not his methodology." *Sioux Steel Co. v. KC Eng'g, P.C.*, No. 4:15-CV-04136-KES, 2018 WL 7082734, at *4 (D.S.D. Sept. 19, 2018). Maxon's critique that Nobilini misuses and misapplies standards to the facts is an "object[ion] to the application rather than the legitimacy of [an expert's] methodology, such objections [are] more appropriately addressed on cross-examination" *Walker v. Gordon*, 46 F. App'x 691, 696 (3d Cir. 2002).

Lastly, Maxon avers Nobilini's opinion is unreliable because he provides an incorrect description of the underlying facts leading up to the incident—more specifically, concerning the technician's movement. ECF No. 68-2 at 16. Maxon submits Nobilini's "inaccurate description of the inspection video . . . demonstrates the unreliability of his opinions" and a lack of fit. *Id.* at

17. The Court finds this argument unavailing. The U.S. Court of Appeals "has interpreted 'reliability to mean that an expert's testimony is admissible so long as *the process or technique* the expert used in formulating the opinion is reliable." *Elgert*, 2019 WL 1294819, at 14. "The evidentiary requirement of reliability is lower than the merits standard of correctness." *Id.* at 14-15. So, whereas here, when a Party "object[s] to the application rather than the legitimacy of [an expert's] methodology, such objections [are] more appropriately addressed on cross-examination" *Walker v. Gordon*, 46 F. App'x 691, 696 (3d Cir. 2002). Maxon's critiques of Nobilini's opinion centers on his accuracy and not the reliability of his methodology. Thus the Court will not exclude Nobilini's report and testimony under the liberal reliability standards of Rule 702 and *Daubert*.

ii. Craig Clauser

Maxon also seeks to preclude the opinion of Plaintiff's expert Craig Clauser. Maxon contends Clauser's opinion is unreliable because (1) Clauser relies on Nobilini's expert report and excessive force conclusion, and (2) Clauser does not provide sufficient support for his conclusions concerning potential alternate designs.⁵

The Court first considers whether Clauser has provided sufficient support for his report and testimony on alternative designs. As stated, the Court is guided by a number of factors including: "(1) whether a method consists of testable hypotheses; (2) whether the method has been subject to peer review; (3) the known or potential rate of error; (4) the existence and maintenance of standards controlling the techniques's operation; (5) whether the method is generally accepted; (6) the relationship of the technique to methods which have been established to be reliable; (7) the qualifications of the expert witness based on the methodology employed; and (8) the non-judicial

⁵ Maxon does not dispute Clauser's engineering qualifications.

uses to which the method has been put." *Simmons v. Ford Motor Co.*, 132 F. App'x 950, 952 (3d Cir. 2005) (citing *Calhoun v. Yamaha Motor Corp.*, 350 F.3d 316, 321 (3d Cir.2003); *Paoli*, 35 F.3d at 742 n. 8). "It is well-established, however, that these factors 'are neither exhaustive nor applicable in every case." *Elgert*, 2019 WL 1294819, at *5.

Furthermore, opinions concerning alternative designs based on engineering principles are unique because they "often involve more idiosyncratic methods of design and testing." *Milanowicz v. The Raymond Corp.*, 148 F. Supp. 2d 525, 532 (D.N.J. 2001). So "... these fields ... rely on established principles of physics, material sciences, and industrial design and often utilize technologically sophisticated and carefully calibrated testing methods and devices." *Id.* In a case involving technical opinions on alternative designs, the U.S. Court of Appeals for the Third Circuit has found "conclusions derive[d] from subjective observations and methodologies[] ... fail[] to meet the reliability requirements of [Federal Rule of Evidence 702] and *Daubert*." *Simmons*, 132 F. App'x at 952 (citing *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 154-55 (1999)). Expert opinions based on "rough-and-ready estimates or mere guesswork" may also fail to meet reliability requirements. *Lynn*, 894 F. Supp. 2d at 619.

Here, Clauser proffers an opinion the subject liftgate was "defectively designed" and "alternate safe designs would eliminate the dangerous condition [of the machine] and prevent injury." ECF No. 75 at 10. Clauser provided five alternative safe designs he contends "would have eliminated the awkward pulling position and/or reduced the required force" to operate the machine. 6 Clauser's methodology behind the alternative designs included inspecting the subject truck and liftgate, performing a "risk-utility analysis" on each design, and calculating the estimated

⁶ ECF No. 68-14 at 5. For further discussion on the sixth alternative design provided by Clauser, *see supra* note 1.

cost of each alternative designed based on his experience "in the metal-fabricating industry for the best part of 50 years." ECF No. 75-7 at 20, Clauser Dep. Tr., 74:2-4; *see also* ECF No. 68-14 at 2-4. Clauser also describes he relied on the "Order of Precedence or Safety Hierarchy," a principle that identifies actions to be taken and the preferred order for taking these actions to safeguard users from hazards associated with equipment. Clauser's report also provides that he performed "a risk utility analysis . . . [to] conclude[] that the seriousness of harm far outweighs the minimal additional cost (if any) of assuring the product was safe. Clauser's report does not provide any quantitative calculations or other measurements of the force required by his proffered alternate designs. Clauser's report also does not feature any drawings or other diagrams of his proposed alternative designs, although he described the placement of certain mechanical features in his deposition. *See e.g.*, ECF No. 75-7 at 18, Clauser Dep. Tr., 66:11-17 (providing measurements of

⁷ ECF No. 68-14 at 4. More specifically, Clauser avers, if equipment presents a hazard, the order of precedence or safety hierarchy theory supports redesigning to eliminate the hazard; if it's not possible to redesign without destroying the utility of equipment, the hazard should be safe guarded. *Id.* at 4-5. If neither redesigning nor safeguarding a piece of equipment is possible, then this theory provides implementing warnings and instructions. *Id.*

⁸ ECF No. 68-14 at 5. In his deposition, Clauser went into further detail concerning the risk utility analyses performed for each individual alternative design largely based on his "experience in medical fabricating industry" ECF No. 75-7 at 20, Clauser Dep. Tr., 74:2-4. Clauser also contended these risk utility analyses considered maintenance issues and costs. *See e.g.*, ECF No. 75-7 at 20, Clauser Dep. Tr., 73:2-23; ECF No. 75-7 at 22, Clauser Dep. Tr., 81:3-24, 82:1-5. Clauser described his maintenance cost analysis as conclusions based on "cost of the material." ECF No. 75-7 at 20, Clauser Dep. Tr., 97:9-20; *see also* ECF No. 68-14 at 5 ("A risk utility analysis was performed, and I concluded that the seriousness of harm far outweighs the minimal additional cost (if any) of assuring the product was safe.").

⁹ In his deposition, Clauser acknowledged his report's lack of calculations, force analyses, drawings, or written calculations. In response, he provided: "I did not do those calculations. They are simple calculations. . . any one of these designs . . . we can make a model, do it, find detailed calculations of different hypothetical targets." ECF No. 75-7 at 20, Clauser Dep. Tr., 88:1-24, 89:1-15; *see also id.* at 19, Clauser Dep. Tr., 69:13-24, 70:1 ("Q. Well, did you make any drawings, created any written calculations that would address the forces associated with [alternative design number one]? A. It's fairly simple. No. I could, but I didn't.").

alternative design number one); *id.* at 20, Clauser Dep. Tr., 74:14-21, 75:3-17 (describing the location and measurement of design aspects of alternative design number two).

Maxon submits Clauser's opinion on design alternatives should be precluded because the designs are "not based on sufficient facts or data and are not the product of reliable principles or methods." ECF No. 68-2 at 23. Maxon also avers, although Clauser's deposition testimony references costs of designs, it "fails to adequately address the risks to the operator . . . or the amount of costs that would be attributable to the increased maintenance that [he] acknowledged would be required for each alternative." *Id.* at 29.

In response, Plaintiff relies on the federal district court's findings in *Elgert v. Siemens Industry, Inc.* No. CV 17-1985, 2019 WL 1294819, at *5 (E.D. Pa. Mar. 20, 2019). In *Elgert*, the court found an expert's report and opinion—concerning, *inter alia*, proposed alternative designs—"would assist the jury in determining whether [a product] could have been designed in a manner that would make it more useful, desirable and safer to users." *Id.* at 8. The court found the expert's opinion reliable particularly in light of his "practical experience." *Id.* at 6.

Like in *Elgert*, Clauser's opinion in this case is based on his practical experience, a review of the record and the facts established in this case, as well as generally accepted principles. *Id.* at 4, 6 (describing the Order of Precedence or Safety Hierarchy as "[a] basic principle of safety engineering"). But, unlike the expert in *Elgert*, Clauser's opinion does not provide mathematical calculations nor diagrams to support his alternative designs. In *Elgert*, when specifically addressing the expert's alternative design testimony, the court emphasized the need for mathematical calculations to support his recommendations of alternative designs. *Id.* at 7 ("Importantly, in [the expert's] deposition he testified regarding the mathematical calculations for the numbers he offers") (emphasis added). The expert also "drew pictures to support his

design based on his knowledge of the machine and other similar designs." *Id.* So, the court found the expert "provided good grounds for his beliefs in the form of explanations, drawings and mathematical calculations to demonstrate that his opinion is based on scientific facts rather than speculation and subjectivity." *Id.*

Therefore, unlike the alternative design expert in *Elgert*, Clauser's alternative design report and testimony does not provide sufficient facts concerning his methodology. Here, Clauser has not provided any mathematical calculations to support his conclusions his alternative designs "would have eliminated the awkward pulling position and/or reduced the required force" to operate the liftgate at issue. ECF No. 68-14 at 5. Nor has Clauser provided any drawings, diagrams, or other models. Clauser also has not administered tests or identified similar products to his alternative designs.

Courts generally look for alternative design experts to provide evidence of calculations, diagrams, or tests to support their opinions. More specifically, federal courts within the Eastern District of Pennsylvania have precluded alternative design experts where the expert provides insufficient calculations concerning the improved design. *See e.g., Rapp v. Singh*, 152 F. Supp. 2d 694, 706 (E.D. Pa. 2001) (precluding (1) an expert's testimony that the overall safety of a product would improve based "solely on 'high school physics[,]" and (2) another expert's testimony who did not perform calculations to support his conclusion); *Montgomery v. Mitsubishi Motors Corp.*, 448 F. Supp. 2d 619, 631 (E.D. Pa. 2006) (excluding the testimony of a proposed design expert who offered "at best, a conclusory statement that provides no specific information regarding whether and how such an alternative design would have prevented this accident from occurring"). In fact, "[n]umerous courts have excluded expert testimony regarding a safer alternative design where the expert failed to create drawings or models or administer tests."

Zaremba v. Gen. Motors Corp., 360 F.3d 355, 358-59 (2d Cir. 2004) (collecting cases); see also Dearson v. Bostrom Seating, Inc., 241 F. Supp. 2d 494, 499 (E.D. Pa. 2003) (precluding experts from testifying because they showed no evidence they used a peer-reviewed, generally accepted, or comparable testing method, nor did they conduct any tests or analysis of alternative seat designs).

Here, Clauser's bare-bones descriptions of proposed alternative designs are similar to other expert opinions found to be unreliable under Daubert. For example, in Zaremaba v. General Motors Corp., the U.S. Court of Appeals for the Second Circuit upheld the district court's finding an expert's testimony concerning a safer alternative design was insufficiently reliable where the expert "satisfied none of the four factors identified in *Daubert*[,]" such as testing the design, subjecting the design to peer review or publication, not providing the design's "known rate of error," and failing to show general acceptance either of his design or methodology. Id. at 358. The court found "[i]n the absence of drawings, models, calculations, or tests, it was not manifest error for the District Court to find that [the expert's] testimony was insufficiently reliable." Id. at 359. And similarly, in Simmons v. Ford Motor Co., the U.S. Court of Appeals for the Third Circuit upheld the preclusion of an expert on alternative design where "[t]he proposed alternative was nothing more than a sketch without a mock-up or testing of the design." And the expert "could [not] affirm the proposed alternative design was in use by any vehicle manufacturer." *Id.* The court also found the expert "offered only his unsubstantiated belief as to what would be a feasible alternative design." *Id.* So, the court upheld the district court's exclusion of the expert's testimony

¹⁰ 132 F. App'x 950, 953 (3d Cir. 2005). The Court notes, in *Simmons*, the U.S. Court of Appeals for the Third Circuit analyzed the expert's evidence based on the plaintiff's burden of proof under New Jersey law. *Id.* Nevertheless, the court's analysis is instructive concerning relevant factors of reliability for alternative design experts.

based on the lack of "data or evidence to support such a conclusion" concerning a practical and feasible alternative design. *Id.*

Like the alternative design expert opinions precluded by other federal courts, Clauser provides unsupported conclusions of proposed alternative designs without the use of testing, data analysis, chats or diagrams, or calculations. None of Clauser's design alternatives provide calculations of how the alternative designs would reduce the force needed to operate the liftgate at issue—the main hazard identified by Nobilini and acknowledged by Clauser. Further, Clauser offers additional explanations concerning maintenance and other operational issues of his proposed designs in his deposition testimony, but even these additional explanations are unsupported by additional testing, calculation, or surveying comparable machines. So these additional explanations do not effectively bolster the reliability of Clauser's methodology. In sum, Clauser's report and deposition testimony on alternative designs do not satisfy the reliability component under Daubert and 702. Clauser's report and testimony will be precluded because they fall short of the reliability standards of Rule 702. 12

iii. Both Nobilini and Clauser

Lastly, Maxon contends both Nobilini's and Clauser's opinions are unreliable in light of "[t]he absence of any other accidents or claims against Maxon for personal insures[sic] arising out of a liftgate user's unfolding of the liftgate" ECF No. 68-2 at 18. In sum, Maxon avers Nobilini and Clauser provide unreliable opinions because they failed to consider the absence of prior accidents or claims arising from injuries caused by a Maxon liftgate. *Id.* Plaintiff contends

¹¹ For further discussion of Clauser's method of performing risk utility analyses, including future operational and maintenance concerns, *see supra* notes 8 and 9 and accompanying text.

¹² Accordingly, the Court does not consider the reliability of Clauser's reliance on Nobilini's excessive force opinion.

his experts are not required to consider records of prior accidents because these records are inadmissible. ECF No. 75 at 28. The Court finds both Parties misconstrue the reliability inquiry under *Daubert*.

Experts may consider inadmissible evidence to form an opinion. *United States v. Gilmore*, 837 Fed. Appx. 101, 104 (3d Cir. 2020) ("An expert may rely on otherwise inadmissible facts and data to form his opinion."); Consulnet Computing, Inc. v. Moore, 631 F. Supp. 2d 614, 623 (E.D. Pa. 2008) ("... [Federal Rule of Evidence] 703 expressly permits experts to rely on inadmissible evidence."). Nevertheless, the ability of an expert to rely on otherwise inadmissible evidence—or any evidence for that matter—differs from whether an expert must rely on particular evidence. See Elgert, 2019 WL 1294819, at *5 ("... an expert's testimony is admissible so long as the process or technique the expert used in formulating the opinion is reliable.") (citing *Pineda*, 520 F.3d at 244 (3d Cir. 2008) (internal citations omitted)). The U.S. Supreme Court has found "[t]he inquiry envisioned by Rule 702 is . . . a flexible one." Daubert, 509 U.S. at 594. And "[t]he focus, of course, must be solely on the principles and methodologies" Id. at 595. Thus, under the liberal and flexible inquiry of an expert's reliability, the Court declines to find Nobilini and Clauser's opinions are unreliable because they failed to consider prior accidents involving the subject liftgate. Although Nobilini and Clauser are permitted to consider certain evidence including, perhaps, prior accidents involving the subject liftgate—it does not follow that their opinions are unreliable because of their failure to do so.

IV. CONCLUSION

The Court finds Nobilini's opinion on excessive force sufficiently reliable and relevant to the instant matter. Accordingly, preclusion of his opinion is not warranted under *Daubert*. But preclusion of Clauser's report and testimony concerning alternative designs is warranted because

his conclusions are not sufficiently supported to meet the reliability requirements of Federal Rule of Evidence 702 and *Daubert*. The Court thus excludes Clauser's report and opinion.

An appropriate Order follows.

BY THE COURT:

/s/ John M. Gallagher

JOHN M. GALLAGHER United States District Court Judge